

Superfund Program
Proposed Plan

U.S. Environmental Protection Agency
Region II

**Rockaway Borough Wellfield
Superfund Site**

August 2006



SDMS Document



109569

EPA ANNOUNCES PROPOSED PLAN

This Proposed Plan identifies the Preferred Alternative for addressing soils at one of the source areas at the Rockaway Borough Wellfield Superfund Site and provides the rationale for this preference. This particular source area is known as the Wall Street/East Main Street (WS/EM) area. The U.S. Environmental Protection Agency (EPA) evaluated a number of remedial measures to address contaminated soil and as explained below, the Preferred Alternative is Excavation with Off-Site Treatment and/or Disposal with Soil Vapor Extraction.

The Proposed Plan includes summaries of all the soil cleanup alternatives evaluated for use at this site. EPA, the lead agency for site activities, issues this document. The New Jersey Department of Environmental Protection (NJDEP) is the support agency. EPA, in consultation with NJDEP, will select a final remedy for the site after reviewing and considering all information submitted during the 30-day public comment period. EPA, in consultation with NJDEP, may modify the Preferred Alternative or select another response action presented in this Plan based on new information or public comments. Therefore, the public is encouraged to review and comment on all the alternatives presented in this Proposed Plan.

EPA is issuing this Proposed Plan as part of its public participation responsibilities under Section 117(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA) and Section 300.430(f) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This Proposed Plan summarizes information that can be found in greater detail in

Dates to remember:

MARK YOUR CALENDAR

PUBLIC COMMENT PERIOD:

August 11 – September 11, 2006

EPA will accept written comments on the Proposed Plan during the public comment period.

PUBLIC MEETING: August 23, 2006 - 7:00 pm

EPA will hold a public meeting to explain the Proposed Plan. EPA will also accept oral and written comments at the meeting. The meeting will be held at **Rockaway Borough Community Center, 21-25 Union Street, Rockaway, New Jersey**. Prior to the start of the meeting, EPA will be available from 6:00 p.m. to 7:00 p.m. to answer questions.

For more information, see the Administrative Record at the following locations:

U.S. EPA Records Center, Region II
290 Broadway, 18th Floor
New York, New York 10007-1866
(212)-637-3261
Hours: Monday-Friday – 9:00 am to 5:00 pm

Rockaway-Borough Free Public Library
82 East Main Street
Rockaway, NJ 07866
(973) 627-5709
Hours: Monday & Wednesday – 12:00 to 8:00 PM
Tuesday, Thursday and Friday – 10:00 am to 8:00 pm

the Operable Unit 3 (OU3) Remedial Investigation/Feasibility Study (RI/FS) reports and other site-related documents contained in the Administrative Record file for this site. EPA encourages the public to review these documents to gain a more comprehensive understanding of the Rockaway Borough Wellfield Site and the Superfund process.

10.00001

SITE HISTORY

The Rockaway Borough Wellfield Site is located in Rockaway Borough in Morris County, New Jersey (See Figure 1). Rockaway Borough is situated in the center of Morris County, approximately 10 miles north of Morristown and 20 miles northwest of Newark in the north-central portion of the state.

Rockaway Borough is approximately 2.1 square miles in size and is located in the central part of Morris County, New Jersey. It is bordered to the north and west by Rockaway Township and to the east and south by Denville Township. Land use in the Borough is a mix of commercial, industrial, and residential. The Rockaway Borough Wellfield Superfund Site includes three municipal water supply wells (nos. 1, 5, and 6), which are located in the eastern section of the Borough. The municipal wells range in depth from 54 to 84 feet below ground surface (bgs) and are located in a glacial aquifer. EPA designated the aquifer a sole source aquifer for the Borough and surrounding communities. The wells supply potable water to approximately 11,000 people.

In 1981, a granular carbon treatment system was installed by the Borough after contamination was discovered in the municipal water supply system. The principal contaminants found in the glacial aquifer include volatile organic compounds (VOCs), primarily tetrachloroethene (PCE) and trichloroethene (TCE). In 1993, an air stripping system was added to improve the treatment of the contaminated groundwater and reduce operating costs.

The WS/EM Area is a portion of the larger Rockaway Borough Wellfield Superfund Site. The sources of the TCE and PCE contamination include industrial operations within the Borough, including the Klockner and Klockner (K&K) facility, and a dry cleaning operation.

In 1985, the NJDEP initiated a Phase I RI/FS. The Phase I report concluded that contamination of the municipal water supply was emanating from multiple source areas within the Borough.

Based on the findings of the 1986 RI/FS, EPA initiated a Phase II RI/FS to identify the contaminant sources, further delineate the full extent of contamination and evaluate remedial action alternatives to address the sources of contamination. Some of the major findings and conclusions of Phase II RI/FS were as follows:

- Groundwater in the northeast portion of Rockaway Borough was contaminated with VOCs, primarily TCE and PCE.
- A PCE groundwater contamination plume originating in the WS/EM Area was affecting Municipal Wells No. 1 and 5. However, the source area was not identified.
- Groundwater contamination from TCE was emanating from the K&K property and impacting the Rockaway Borough Well Field, specifically Municipal Well No. 6;

The remedy selected in a September 30, 1991 Record of Decision (ROD) called for extraction and treatment of two areas of groundwater contamination referred to as the K&K and WS/EM plumes. The remedy also called for further investigations to determine the source of the PCE and TCE plumes. In 2003, EPA began an RI/FS for the WS/EM Area.

The WS/EM Area is primarily a commercial area in the heart of downtown Rockaway Borough. The RI Study Area encompassed businesses located in this area including dry cleaning, auto body repair, auto service and repair, banking, hardware, hairdressing, convenience stores, and food establishments. In addition, Borough Police and Fire Departments, Memorial Park, and municipal parking lots are located within the Study Area.

The developed portions of the WS/EM Area are covered by impervious surfaces including asphalt roadways, driveways, and parking areas; and concrete building slabs and sidewalks. A limited

number of small, fragmented areas of exposed soils comprising suburban parkland, mowed lawns, ball fields and playgrounds, and fragmented areas of forested habitats, occur in the WS/EM Area.

CURRENT STATUS

A potentially responsible party is presently performing the groundwater cleanup for the K&K plume. Construction of the groundwater extraction and treatment system has been completed and operation of the system began in January 2006.

The Remedial Design for the WS/EM Area, which was completed in February 2006, includes development of engineering drawings and specifications. Construction of the groundwater extraction and treatment system is scheduled to begin in early 2007. The United States Army Corps of Engineers, under an agreement with EPA, will be constructing the system.

The groundwater treatment system for the WS/EM Area will consist of three extraction wells, forcemains, air stripping and the discharge of treated water to the Rockaway River. The projected timeframe to restore the aquifer is 30 years.

An RI/FS is currently in progress to characterize the K&K source Area and one for the WS/EM source Area has been completed. The WS/EM Area RI/FS is the subject of this Proposed Plan.

SITE CHARACTERISTICS

There have been numerous investigations conducted at the Rockaway Borough Wellfield Superfund Site to define the nature and extent of groundwater contamination, examine potential migration routes by which contamination could reach the Borough's Wellfield, and to identify potential sources of contamination.

The following discussion relates only to the results of the source area RI/FS conducted at the WS/EM Area.

Samples were collected from surface and subsurface soil. In general, the samples were analyzed for VOCs, semivolatile organic compounds, pesticides, and metals. VOCs are the only contaminant of concern at the site. Therefore, the investigations focused on just the nature and extent of VOCs. A summary of the findings for each media sampled is presented below.

Surface Contamination

Surface soils (i.e., 0 to 1 foot below ground surface (bgs)) were collected from 17 boring locations, along with two duplicate samples (for a total of 19 soil samples). Eleven individual VOCs were detected in the surface soils; PCE was the only constituent that exceeded the NJDEP Impact to Groundwater Soil Cleanup Criteria (IGSCC). PCE was present in 10 of the 19 surface soil samples.

PCE occurred at concentrations exceeding its most conservative criteria value [the NJDEP IGSCC (1,000 micrograms per kilogram (ug/kg))] in surface soil samples. Lower concentrations of PCE were present in five other locations (i.e., detected range: 4 to 49 ug/kg). PCE was not detected in any of the three background locations. The more elevated concentrations of PCE in surface soil are present in the WS/EM Area.

Subsurface Contamination

Shallow subsurface soils (i.e., 1 to about 10 feet bgs) were collected from ten locations, while deeper subsurface soils (i.e., about 8 to 42 feet bgs) were collected from five locations. A total of 46 subsurface soil samples and two duplicate samples were analyzed.

Although 10 VOCs were detected, only PCE exceeded its most conservative criteria value (i.e., 1,000 ug/kg) in four depth interval samples from three boring locations.

WHAT ARE THE POTENTIAL "CONTAMINANTS OF CONCERN"?

PCE, benzene, methylene chloride, chromium and lead were detected at the Site above the NJDEP Impact to Groundwater Soil Cleanup Criteria. Based on validity of the analytical results, frequency of occurrence, toxicological, physical, and chemical characteristics, the Baseline Human Health Risk Assessment identified only PCE as a Contaminant of Concern.

Contaminated groundwater is generally not considered to be a "principal threat". However, the source area associated with this proposed plan is considered to be a "principal threat" to the groundwater. The OU3 remedy will address this "principal threat" via excavation of the contaminated soil, which acts as a source for groundwater contamination.

WHAT IS A "PRINCIPAL THREAT"?

The NCP establishes an expectation that EPA will use treatment to address the principal threats posed by a site wherever practicable (NCP Section 300.430(a)(1)(iii)(A)). The "principal threat" concept is applied to the characterization of "source materials" at a Superfund site. A source material is material that includes or contains hazardous substances, pollutants or contaminants that act as a reservoir for migration of contamination to groundwater, surface water or air, or acts as a source for direct exposure. Contaminated groundwater generally is not considered to be a source material; however, Non-Aqueous Phase Liquids (NAPLs) in groundwater may be viewed as source material. Principal threat wastes are those source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained, or would present a significant risk to human health or the environment should exposure occur. The decision to treat these wastes is made on a site-specific basis through a detailed analysis of the alternatives using the nine remedy selection criteria. This analysis provides a basis for making a statutory finding that the remedy employs treatment as a principal element

Summary

The nature and extent of soil contamination present in the WS/EM Area was assessed through sampling of surface, shallow subsurface and deep subsurface soils. In addition, an evaluation of available historical information and the results of the geophysical and soil gas surveys were performed to assist in the determination of potential contaminant source areas.

PCE is the primary contaminant at the site, and is present at elevated concentrations in the soil (i.e., up to 14,000 ug/kg) in the surface and 730 ug/kg in the subsurface) specifically in the vicinity of Lusardi's Cleaners, the southeastern portion of Municipal Parking Lot #2, and the parking lot west of the Rockaway Borough Police Station.

SCOPE AND ROLE OF ACTION

As in many complex Superfund sites, this site has been divided into three Operable Units (OUs) or phases. OU1 was the site-wide investigation to identify the contaminants in the Borough water supply. OU2 was created when the remedy was selected to treat the groundwater plumes. This action, referred to as OU3, is intended to be the first of two source area remedial actions for the site. This Proposed Plan summarizes the remedial alternatives detailed in the Feasibility Study, and discusses the preferred alternative for addressing contaminated soil.

Human Health Risk Assessment:

A Superfund baseline human health risk assessment is an analysis of the potential adverse health effects caused by hazardous substance releases from a site in the absence of any actions to control or mitigate these under current and future land uses. A four-step process is utilized for assessing site-related human health risks for reasonable maximum exposure scenarios.

Hazard Identification: In this step, the chemicals of concern (COCs) at the site in various media (i.e., soil, groundwater, surface water, and air) are identified based on such factors as toxicity, frequency of occurrence, and fate and transport of the contaminants in the environment, concentrations of the contaminants in specific media, mobility, persistence, and bioaccumulation.

Exposure Assessment: In this step, the different exposure pathways through which people might be exposed to the contaminants identified in the previous step are evaluated. Examples of exposure pathways include incidental ingestion of and dermal contact with contaminated soil. Factors relating to the exposure assessment include, but are not limited to, the concentrations that people might be exposed to and the potential frequency and duration of exposure. Using these factors, a "reasonable maximum exposure" scenario, which portrays the highest level of human exposure that could reasonably be expected to occur, is calculated.

Toxicity Assessment: In this step, the types of adverse health effects associated with chemical exposures, and the relationship between magnitude of exposure and severity of adverse effects are determined. Potential health effects are chemical-specific and may include the risk of developing cancer over a lifetime or other non-cancer health effects, such as changes in the normal functions of organs within the body (e.g., changes in the effectiveness of the immune system). Some chemicals are capable of causing both cancer and non-cancer health effects.

Risk Characterization: This step summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative assessment of site risks. Exposures are evaluated based on the potential risk of developing cancer and the potential for non-cancer health hazards. The likelihood of an individual developing cancer is expressed as a probability. For example, a 10^{-4} cancer risk means a "one-in-ten-thousand excess cancer risk", or one additional cancer may be seen in a population of 10,000 people as a result of exposure to site contaminants under the conditions explained in the Exposure Assessment. Current Superfund guidelines for acceptable exposures are an individual lifetime excess cancer risk in the range of 10^{-4} to 10^{-6} (corresponding to a one-in-ten-thousand to a one-in-a-million excess cancer risk) with 10^{-6} being the point of departure. For non-cancer health effects, a "hazard index" (HI) is calculated. An HI represents the sum of the individual exposure levels compared to their corresponding reference doses. The key concept for a non-cancer HI is that a "threshold level" (measured as an HI of less than 1) exists below which non-cancer health effects are not expected to occur.

SUMMARY OF SITE RISKS

As part of the RI/FS, EPA conducted a baseline risk assessment to determine the current and future effects of the contaminants on human health and the environment. The site is currently used as a commercial facility, and any future use is expected to be the same. Therefore, the baseline risk assessment focused on health effects for populations typically associated with commercial facilities, site workers and future construction workers that could result from current and future direct contact with contaminated surface and subsurface soils.

Human Health Risk Assessment Findings

The carcinogenic risks and non-carcinogenic hazards for soil exposures at the WS/EM Area showed values that were within EPA's target risk range for carcinogens and below the Hazard Index (HI) of 1 for non-carcinogens (please see the box on this page for an explanation of these terms) for all populations evaluated under both current and future use scenarios. A complete discussion of the risks and hazards can be found in the Baseline Human Health Risk Assessment.

Although the risks and hazards associated with soil exposure are within or below EPA's acceptable values, the soil concentrations of PCE are above the concentrations that are associated with an adverse impact to groundwater; thus, there is a need to address the soil through a remedial action.

Ecological Risks

A Screening Level Ecological Risk Assessment (SLERA) was performed for the Area. The SLERA determined that because the majority of the observed concentrations is comparable to background or below screening level benchmark values and due to the lack of usable terrestrial habitat for ecological receptors at the WS/EM Area, risks to ecological receptors are deemed to be low. Therefore, ecologically based screening criteria are not presented and will not be utilized to assist in the interpretation of the nature and extent of soil contamination at the Area.

Remedial Action Objectives

The overall remediation goal for this area is to protect human health and the environment. The remedial action objective (RAO) has been identified to mitigate the potential risks associated with the WS/EM Area.

Soil

The RAO for the contaminated soil at the WS/EM Area is:

1. Reduce the potential for further migration of PCE from the contaminated soil into groundwater.

The Preliminary Remediation Goal for PCE in soil was identified from the New Jersey Impact to Groundwater Soil Criteria and is 1 mg/kg.

Summary of Remedial Alternatives

Based on technology screening and process option evaluation, the potential soils remedial alternatives developed for the site are as follows:

- S-1: No Action
- S-2: Limited Action
- S-3: *In-Situ* Treatment (SVE) and Hot-Spot Excavation with Off-Site Treatment and/or Disposal
- S-4: Excavation with Off-Site Disposal with SVE

Alternative S-1: No Action

Estimated Capital Cost: \$0

Estimated Annual O&M Cost: \$0

Estimated Present Worth: \$0

Estimated Construction Time Frame: None

Regulations governing the Superfund program require that the "no action" alternative be evaluated to establish a baseline for comparison. Under this alternative, EPA would take no action at the site to prevent the migration of the contamination to the groundwater. Since this alternative results in contaminants remaining on the site above levels that would not allow for

unlimited use and unrestricted exposure, a review of the site at least every five years would be required.

Alternative S-2: Limited Action

Estimated Capital Cost: \$27,000

Estimated Annual O&M Cost: \$0

Estimated Present Worth: \$0

Estimated Construction Time Frame: None

The Limited Action Alternative would include implementation of administrative controls such as deed notices. The deed notices, or comparable administrative control, would be implemented to ensure that future activities at the WS/EM Area (e.g., excavation) would be performed with knowledge of the WS/EM Area conditions and implementation of appropriate health and safety controls. Since this alternative results in contaminants remaining on the site above levels that would not allow for unlimited use and unrestricted exposure, a review of the site at least every five years would be required.

Alternative S-3: *In-Situ* Remediation (SVE) and Hot-Spot Excavation with Off-Site Treatment and/or Disposal

Estimated Capital Cost: \$410,000

Estimated Annual O&M Cost: \$0

Estimated Present Worth: \$410,000

Estimated Construction Time Frame: 1 year

Estimated Time to Achieve RAO: 2 years

This alternative includes *in-situ* remediation via soil vapor extraction (SVE) in an effort to address the RAO by removing PCE as a potential ongoing source of groundwater contamination. SVE would be used to remediate PCE in the unsaturated (vadose) zone soil. To implement SVE, a vacuum is applied to the soil through a series of wells to induce the controlled flow of air to remove VOCs from the soil. The captured vapors are then treated to applicable air standards. An estimated area of PCE-impacted soil, based on information provided in the RI Report and the April 2006 Focused Field Sampling, is 195 ft².

A hot-spot excavation will occur in parallel with the SVE system to remove approximately 20 cubic yards (yd³) of PCE-contaminated soil in a parking area southwest of the Rockaway Borough Police Station.

Excavated soils would be analyzed for disposal parameters and would be containerized for off-site disposal. The excavated soils would be trucked off-site for treatment, as needed, and disposed of in accordance with federal and state regulations. Upon completion of contaminated soil removal, the excavation would be backfilled and compacted, and the surface would be restored.

Excavation would remove contaminated soil and meet the NJDEP Impact to Groundwater criteria, and post-excavation sampling would confirm that the criteria have been met.

If during pre-design investigation sampling it is determined that soil under the Lusardi's Dry Cleaner building would need to be remediated, the SVE system may be expanded to address the remaining soil contamination.

Because this alternative is expected to achieve the cleanup goals and not leave hazardous substances, pollutants or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, a five-year review may not be required.

Alternative S-4: Excavation with Off-Site Treatment and/or Disposal with SVE

Estimated Capital Cost: \$320,000

Estimated Annual O&M Cost: \$0

Estimated Present Worth: \$320,000

Estimated Construction Time Frame: 3-6 months

Estimated Time to Achieve RAO: 6 months

In this alternative, PCE-contaminated soils are removed via excavation. The excavated material would be transported off-site for treatment and/or disposal, at a facility designed and permitted for disposal of PCE-contaminated soil. The estimated volume of impacted soil, based on information in the RI report is approximately 40 cubic yards, excluding contamination that may

be located beneath the Lusardi's Dry Cleaner building. However, additional action level exceedences could be detected during post-excavation confirmatory sampling, which could increase the scope during remedial construction.

Excavated soils would be analyzed for disposal parameters and would be containerized for off-site disposal. The excavated soils would be trucked off-site for treatment, as needed, and disposed of in accordance with federal and state regulations. Upon completion of contaminated soil removal, the excavation would be backfilled and compacted, and the surface would be restored.

Excavation would remove contaminated soil and meet the NJDEP Impact to Groundwater criteria, and post-excavation sampling would confirm that the criteria have been met.

If during pre-design investigation sampling it is determined that soil under the Lusardi's Dry Cleaner building would need to be remediated, an SVE component may be added to this alternative to address the remaining soil contamination. The capital costs for this alternative reflect the use of the SVE system.

Because this alternative is expected to achieve the cleanup goals and not leave hazardous substances, pollutants or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, a five-year review may not be required.

EVALUATION OF ALTERNATIVES

Nine criteria are used to evaluate the different remediation alternatives individually and against each other in order to select the best alternative. This section of the Proposed Plan profiles the relative performance of each alternative against the nine criteria, noting how it compares to the other options under consideration. The nine evaluation criteria are discussed below. A "Detailed Analysis of Alternatives" can be found in the Feasibility Study.

1. Overall Protection of Human Health and the Environment

Alternative S-1 would provide no protection of human health and the environment since the contamination is left on-site. Alternative S-2 would provide limited protection of human health and the environment by reducing potential risks by utilizing institutional controls. Alternatives S-3 and S-4 would provide protection of human health and the environment by eliminating, reducing, or controlling risk through the removal or treatment of contaminated material.

Because the "no action" alternative (S-1) is not protective of human health and the environment, it was eliminated from consideration under the remaining eight criteria.

2. Compliance with ARARs

Actions taken at any Superfund site must meet all Applicable or Relevant and Appropriate Requirements (ARARs) of federal and state law or provide grounds for invoking a waiver of these requirements. These include chemical-specific, location-specific, and action-specific ARARs. There are no chemical-specific ARARs for soil, only To-Be-Considered cleanup numbers (TBC). The New Jersey Impact to Groundwater Soil Criteria are TBCs. Alternatives S-3 and S-4 would meet the TBCs for the contaminated soils. Alternative S-2 would not meet the TBCs for the contaminated soils. Location-specific ARARs would not be triggered for any of the alternatives, however, should the remediation area expand to the former Morris Canal, National Register of Historical Places requirements would be triggered. Alternatives S-3 and S-4 would attain action-specific ARARs for the contaminated soils, which would include RCRA Transportation and Disposal requirements. Alternative S-2 would not attain action-specific ARARs for the contaminated soils.

3. Long-Term Effectiveness and Permanence

Of the remaining alternatives, the magnitude of residual risks is highest for Alternative S-2.

Alternative S-2 relies on land use restrictions and public education programs aimed at informing the public about potential hazards posed by exposure to contaminants in the soil.

Alternatives S-3 and S-4 both mitigate the ongoing source of groundwater contamination. Alternative S-3 uses limited excavation and *in-situ* treatment to reduce contaminant mass in the vadose zone. Alternative S-4 uses excavation and off-site disposal to remove contaminant mass from the Site with the contingency to use *in-situ* treatment should additional sources be located. Alternatives S-3 and S-4 are both permanent remedies and effective in the long-term.

4. Reduction of Toxicity, Mobility, or Volume of Contaminants Through Treatment

Alternative S-2 would not reduce toxicity, volume or mobility through treatment. Alternatives S-3 and S-4 would reduce contaminant mobility through removal and disposal or regeneration of the spent granular activated carbon (GAC) and removal and disposal of soils at approved off-site facilities. Alternative S-3 (and potentially Alternative S-4 if the SVE contingency is implemented) would also reduce the volume of contaminated media by transferring contaminants from soil to GAC. For Alternatives S-3 and S-4, pre-disposal treatment, if necessary, could potentially reduce the toxicity and volume of the contaminated soils.

5. Short-Term Effectiveness

Alternative S-2 does not involve any physical treatment; there are no short-term risks to the community or workers as well as no environmental effects.

Alternative S-3 would present short-term risks to the community relating to inhalation exposure that would be mitigated by air monitoring and engineering controls. Risks relating to inhalation exposure by workers, would be mitigated by air monitoring and a health and safety program. The *in-situ* remediation is anticipated to create

minimal environmental effects since the WS/EM Area is highly developed.

Alternative S-4 would present short-term risks to the community relating to exposure to contaminated soil. This exposure will be mitigated with the use of air monitoring, dust suppression, and restricted site access. Risks relating to inhalation exposure by workers, would be mitigated by air monitoring, dust suppression, and a health and safety program. Excavation is anticipated to create minimal environmental effects since the WS/EM Area is highly developed.

6. Implementability

Alternative S-2 could be easily implemented. Coordination with state and local governments will be required for implementing institutional controls and educational programs. Coordination with state and local authorities will be required for five-year reviews.

Alternative S-3 and possibly S-4 (if the SVE is needed) would be somewhat difficult to implement because of limited available space to install a treatment building. Coordination with state and local governments in addition to property owners and tenants would be required for placement of extraction wells and associated treatment equipment.

Alternative S-4 would be easily implemented using conventional construction equipment and materials; however, some specialized techniques may be required for excavation in close proximity to building foundations and would require coordination with state and local governments in addition to property owners and tenants. This alternative would also potentially impact businesses since the excavation would occur near buildings as well as the need to close a portion of a municipal parking lot during excavation work.

7. Cost

The estimated present worth costs of the Alternatives are:

Alternative S-2 (Limited Action): potential capital costs involved with the implementation of the institutional controls -\$27,000.

Alternative S-3 (*In-situ* Treatment and Hot Spot Excavation): operating costs are only needed until RAO is achieved -\$410,000.

Alternative S-4 (Excavation with Off-Site Disposal and SVE): have capital costs until RAO is achieved and may have operating costs if SVE treatment is needed - \$320,000.

8. State/Support Agency Acceptance

The State of New Jersey is currently evaluating EPA's Preferred Alternative in this Proposed Plan.

9. Community Acceptance

EPA will evaluate community acceptance of the Preferred Alternative after the public comment period ends. EPA will discuss community acceptance in the Record of Decision, the document that formalizes the selection of the remedy for the Area.

SUMMARY OF THE PREFERRED ALTERNATIVES

Based on the evaluation of remedial alternatives that was presented in the previous section, EPA has selected Alternative S-4 as its Preferred Alternative. This alternative involves excavation and off-site treatment and/or disposal of contaminated soils, and use of an SVE system for contamination beneath the Lusardi's Dry Cleaner building at the WS/EM Area.

The Preferred Alternative satisfies the remedial action objectives and the requirements of CERCLA, as amended, and the NCP. It will require 1-2 years of operation for the remedy to meet the cleanup criteria, which are the New Jersey Impact to Ground Water Soil Cleanup Criteria.

The Preferred Alternative provides the best balance of trade-offs among alternatives with respect to the nine CERCLA evaluation criteria. The Preferred Alternative is protective of human health and the environment, complies with ARARs and cleanup criteria, is cost-effective, and uses permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. The Preferred Alternative also meets the statutory preference for the use of treatment as a principal element to the maximum extent practicable.

COMMUNITY PARTICIPATION

EPA provides information regarding the cleanup of the Rockaway Borough Wellfield Superfund Site to the public through public meetings, the Administrative Record file for the site, and announcements published in the local newspaper. EPA and the State encourage the public to gain a more comprehensive understanding of the site and the Superfund activities that has been conducted there. The front page of this Proposed Plan shows the dates for the public comment period, the date, location, and time of the public meeting, and the locations of the Administrative Record files.

EPA Region 2 has designated a point-of-contact for community concerns and questions about the Superfund program. To support this effort, the Agency has established a 24-hour, toll-free number the public can call to request information, express concerns or register complaints about Superfund. The Public Liaison Manager for EPA's Region 2 office is:

George H. Zachos
Toll-free (888) 283-7626
(732) 321-6621

U.S. EPA Region 2
2890 Woodbridge Avenue, MS-211
Edison, New Jersey 08837

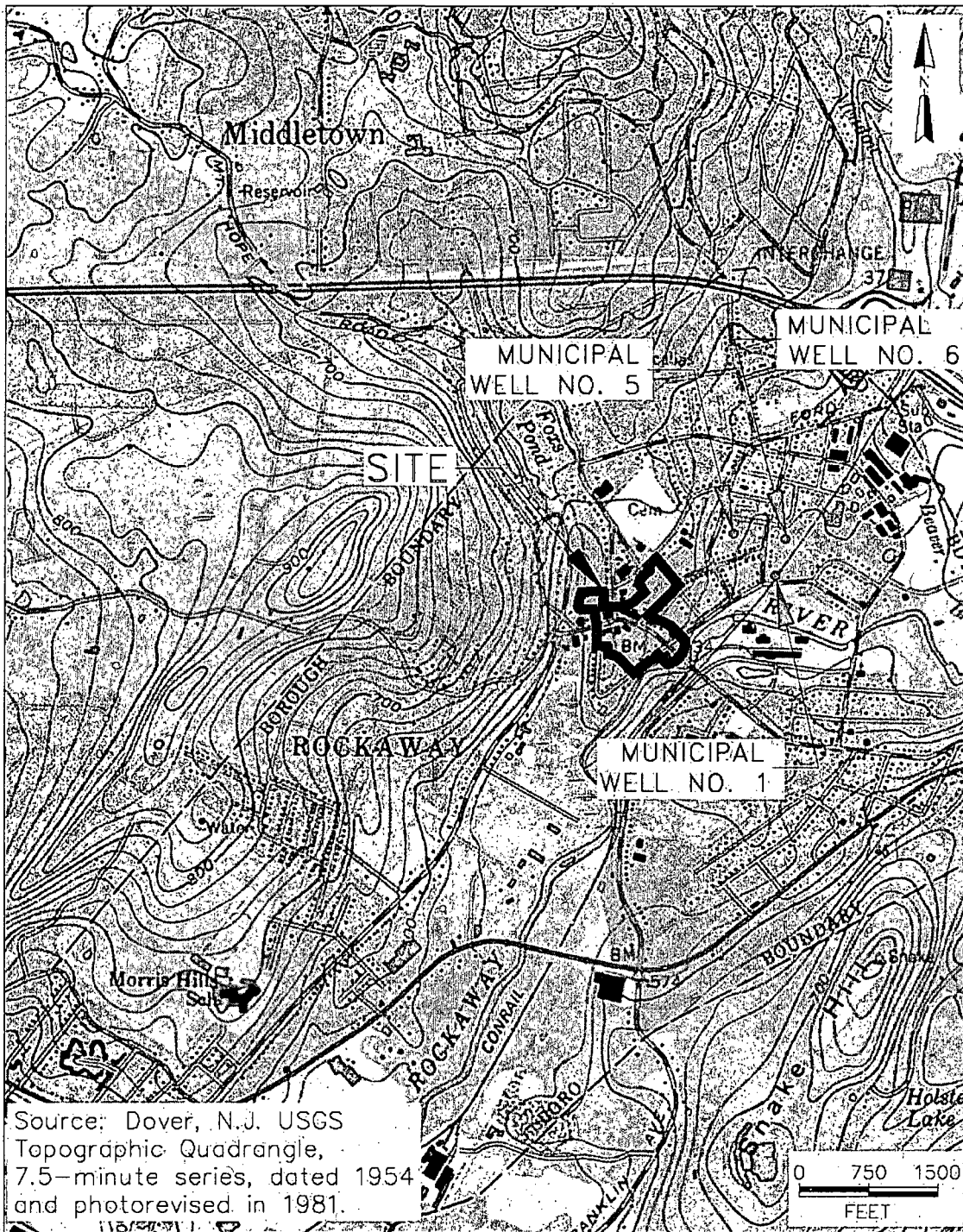
For further information on the Rockaway Borough Wellfield site, please contact:

Brian Quinn
Project Manager

(212) 637-4381
quinn.brian@epa.gov

Cecilia Echols
Community Involvement
Coordinator
(212) 637-3678
echols.cecilia@epa.gov

U.S. EPA
290 Broadway
New York, New York 10007-1866



TITLE:

SITE LOCATION MAP

PROPOSED PLAN

ROCKAWAY BOROUGH WELLFIELD RI/FS

DWN:

CTS

DES:

CTS

PROJECT NO.:

CHKD:

LH

APPD:

BQ

FIGURE NO.:

DATE:

8/8/2006

REV.:

0

1